



From activity-based costing to Value-based Care in Danish Health Care

Breddam, Henrik Bøgedal; Edwards, Kasper; Vilhelmsen, Charlotte

Publication date:
2018

Document Version
Peer reviewed version

[Link back to DTU Orbit](#)

Citation (APA):
Breddam, H. B. (Author), Edwards, K. (Author), & Vilhelmsen, C. (Author). (2018). From activity-based costing to Value-based Care in Danish Health Care. Sound/Visual production (digital)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

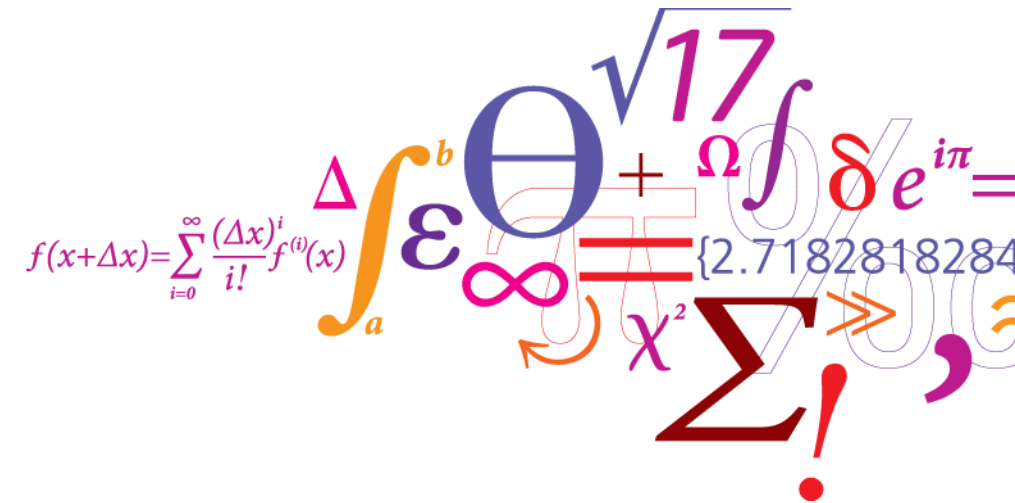
- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

From activity-based costing to Value-based Care in Danish Health Care

By Henrik Bøgedal Breddam¹, Kasper Edwards¹, Charlotte Vilhelmsen¹

¹DTU Management Engineering



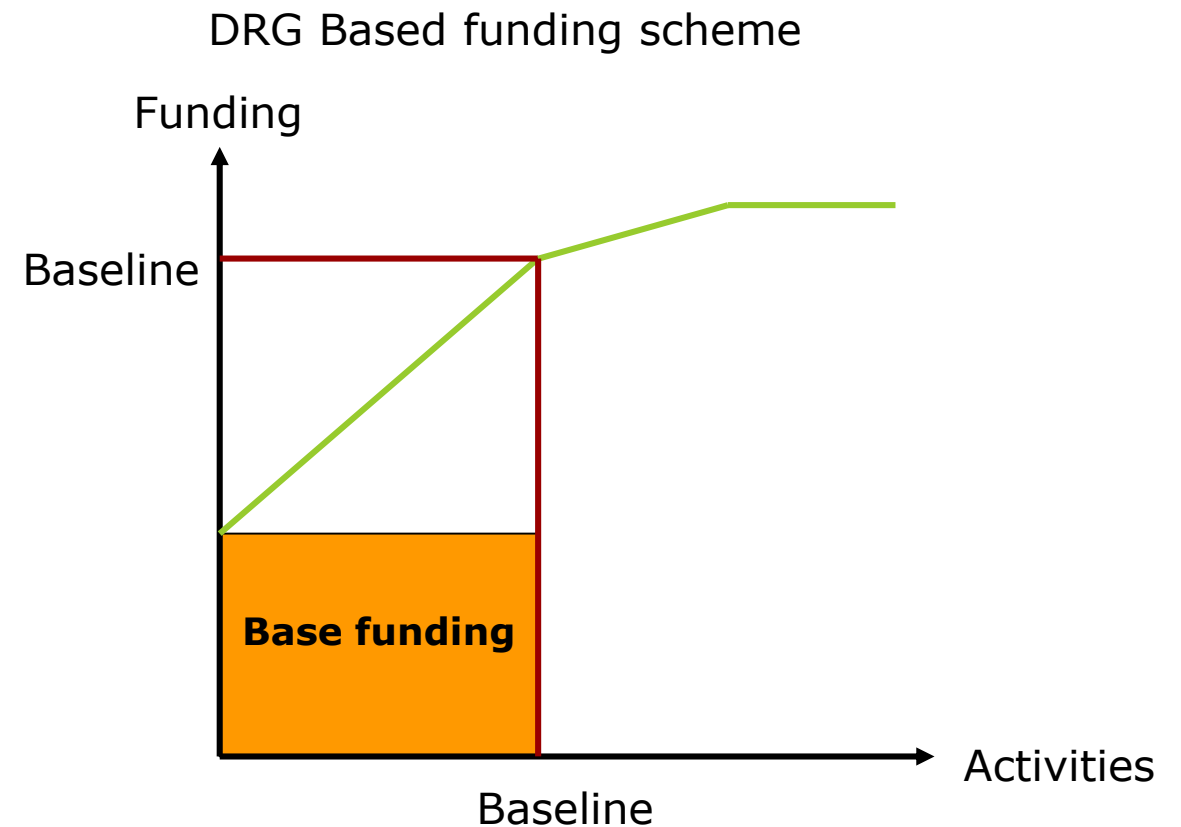
Why Do We Need Value Based Health Care?

"You get what you measure!"



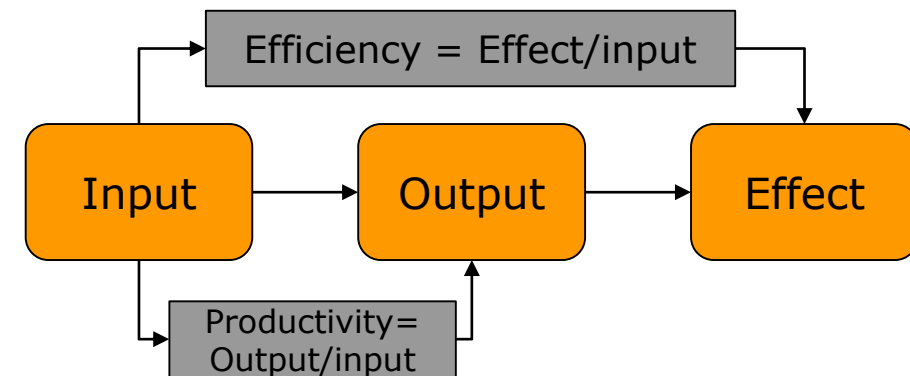
Up to speed on the Danish Health Care System

- Managed by 5 regions
- Funded by:
 - ~82% State
 - ~18% Municipality
- Based on Diagnosis Related Grouping
- 2% annual growth in baseline level



The Danish Discussion

- The system have become very productive
- But what about the effect?
- Choice of less invasive treatment:
 - Often preferred by patients
 - Shorter recovery time
 - Cheaper
- Moving care to lowest effective cost level
- Consolidation of treatment



What is Value?

- Michael Porter provides a good definition:

$$\text{Value} = \frac{\text{Outcome}}{\text{Cost}}$$

Multi dimensional

- Survival
- Health status
- Time of recovery
- Patient experience
- Etc.

Measured over the full care cycle

- Porters grand vision: Design a system that competes on value and the free market will in it self maximize it!

Value Based Health Care in a Danish Context

- Earlier trials:
 - Medical staff choose clinical KPIs
 - Bornholm Hospital in its entirety with 8 initiatives to improve value
 - Incentive linked to value statements
 - Flexible ambulatory care
- I have analysed 7 cases from Capitol Region:
 - 4 projects that are focused on deferring unnecessary activities
 - 3 projects that work with Value as a management tool

Finding the Implications of Value Based Health Care

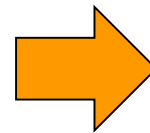
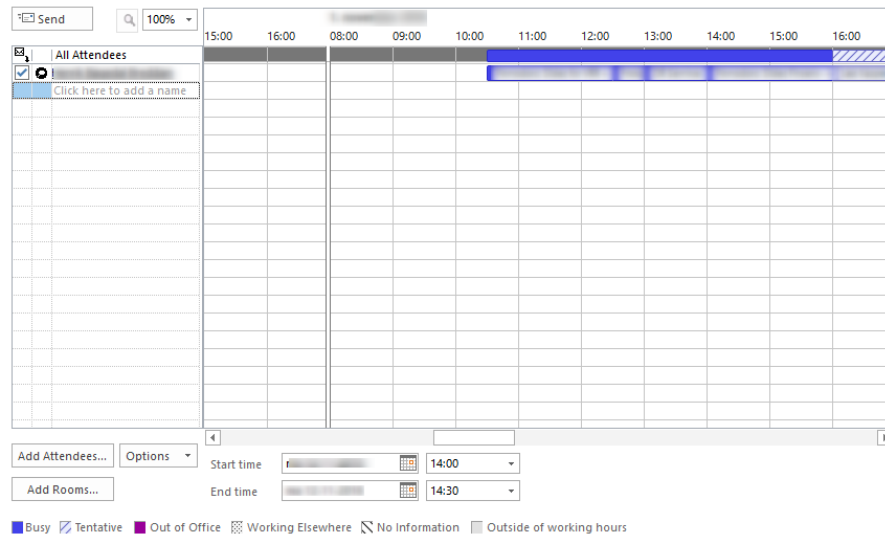


- Task 1: Identify the operational changes going from activity based to value based
- Assumption: Some operational tools needs to change such as:
 - Planning and scheduling models and algorithms
 - Decision support tools
- Task 2: Create Value Based models for health care planning using Operations Research
- Task 3: Implement these tools in a department

Example: Planning Needs Based Ambulatory Care

- Moving from periodic check-ups to needs based ambulatory care means:
 - More time critical and include several functions
 - Change in patient mix
 - More focus on how to live with the medical condition

1 doctor 6 month ahead



6 hospital 1 week ahead

